

## 6.5A Percents, Fractions, Decimals Practice

Date \_\_\_\_\_ Period \_\_\_\_\_

**Write each as a fraction.**

1) 50%

2) 54%

3) 385%

4) 96%

5) 14%

**Write each as a decimal. Round to the thousandths place.**

6) 38%

7) 0.8%

8) 0.5%

9) 7%

10) 80%

**Write each as a percent. Round to the nearest tenth of a percent.**

11) 0.98

12) 0.5

13) 0.09

14) 0.34

15) 0.92

16)  $\frac{13}{45}$

17)  $\frac{3}{25}$

18)  $\frac{1}{5}$

19)  $\frac{11}{15}$

20)  $\frac{21}{31}$

## 6.5A Finding a Percent of a Number practice

Solve each problem.

- 1) What is 40% of 68?
- 2) What is 46% of 68?
- 3) What is 36% of 44?
- 4) 69% of 46 is what?
- 5) What is 50% of 45?
- 6) What is 59% of 21?
- 7) 66% of 21 is what?
- 8) 72% of 22 is what?
- 9) 56% of 45 is what?
- 10) What is 53% of 21?
- 11) What is 33% of 68?
- 12) What is 76% of 46?
- 13) 43% of 44 is what?
- 14) 79% of 22 is what?
- 15) What is 63% of 45?

**Reteaching 6-6****Proportions and Percents**

What percent of 98 is 24.5?

You can solve percent problems by writing and solving a proportion.

Any percent problem of the form  $x\%$  of  $a$  is  $b$  can be written as:

$$\frac{x}{100} = \frac{b}{a}$$

$$\text{so } \frac{x}{100} = \frac{24.5}{98}$$

Write a proportion.

$$98x = 2,450$$

Write cross products.

$$\frac{98x}{98} = \frac{2,450}{98}$$

Divide each side by 98.

$$x = 25$$

Simplify.

24.5 is 25% of 98.

**Write a proportion. Then solve. Where necessary, round to the nearest tenth or tenth of a percent.**

- |   |  |
|---|--|
| 1. What percent of 75 is 60?<br>_____         | 2. What percent of 68 is 51?<br>_____          |
| 3. What percent is 17 of 25?<br>_____         | 4. What percent of 51 is 65?<br>_____          |
| 5. What percent of 144 is 126?<br>_____       | 6. What percent of 95 is 25?<br>_____          |
| 7. Find 24% of 120.<br>_____                  | 8. Find 75% of 76.<br>_____                    |
| 9. Find 260% of 30.<br>_____                  | 10. Find $27\frac{1}{2}\%$ of 96.<br>_____     |
| 11. Find 38% of 32.<br>_____                  | 12. Find 17% of 85.<br>_____                   |
| 13. 40% of $x$ is 28. What is $x$ ?<br>_____  | 14. 9% of $k$ is 27. What is $k$ ?<br>_____    |
| 15. 75% of $p$ is 12. What is $p$ ?<br>_____  | 16. 0.9% of $h$ is 276. What is $h$ ?<br>_____ |
| 17. 13% of $r$ is 209. What is $r$ ?<br>_____ | 18. 68% of $j$ is 44. What is $j$ ?<br>_____   |

**Reteaching 6-7****Percents and Equations**

You can solve percent problems by writing and solving an equation.

8 is 16% of what?

$8 = 0.16 \cdot n$  Write an equation. Write the percent as a decimal.

$\frac{8}{0.16} = \frac{0.16n}{0.16}$  Divide each side by 0.16.

$50 = n$  Simplify

8 is 16% of 50.

**Write and solve an equation. Where necessary, round to the nearest tenth or tenth of a percent.**

1. What percent is 84 of 60?

\_\_\_\_\_

3. What percent is 22 of 33?

\_\_\_\_\_

5. What percent is 18 of 48?

\_\_\_\_\_

7. Find 37.5% of 104.

\_\_\_\_\_

9. Find 68% of 150.

\_\_\_\_\_

11. Find 12.5% of 56.

\_\_\_\_\_

13. 95% of  $h$  is 60. What is  $h$ ?

\_\_\_\_\_

15. 30% of  $n$  is 42. What is  $n$ ?

\_\_\_\_\_

17. 25% of  $y$  is 96. What is  $y$ ?

\_\_\_\_\_

2. What percent of 40 is 26?

\_\_\_\_\_

4. What percent of 32 is 28?

\_\_\_\_\_

6. What percent of 81 is 18?

\_\_\_\_\_

8. Find 0.4% of 25.

\_\_\_\_\_

10. Find 180% of 65.

\_\_\_\_\_

12. Find 86% of 55.

\_\_\_\_\_

14. 24% of  $m$  is 17. What is  $m$ ?

\_\_\_\_\_

16. 28% of  $b$  is 49. What is  $b$ ?

\_\_\_\_\_

18. 72% of  $k$  is 234. What is  $k$ ?

\_\_\_\_\_

## 6.5A Percents, Fractions, Decimals Practice

Date \_\_\_\_\_

Period \_\_\_\_\_

Write each as a fraction.

1) 50%

$\boxed{\frac{1}{2}}$

2) 54%

$\frac{54}{100} = \boxed{\frac{27}{50}}$

3) 385%

$\frac{385}{100} = 3\frac{85}{100} = \boxed{3\frac{17}{20}}$

4) 96%

$\frac{96}{100} = \boxed{\frac{24}{25}}$

5) 14%

$\frac{14}{100} = \boxed{\frac{7}{50}}$

Write each as a decimal. Round to the thousandths place.

6) 38%

$\boxed{0.38}$

7) 0.8%

$\boxed{0.008}$

8) 0.5%

$\boxed{0.005}$

9) 7%

$\boxed{0.07}$

10) 80%

$\boxed{0.8}$

Write each as a percent. Round to the nearest tenth of a percent.

11) 0.98

$\boxed{98\%}$

12) 0.5

$\boxed{50\%}$

13) 0.09

$\boxed{9\%}$

14) 0.34

$\boxed{34\%}$

15) 0.92

$\boxed{92\%}$

16)  $\frac{13}{45}$ 

$0.2\bar{8} \quad \boxed{28.\bar{8}\%}$   
 $\boxed{28.9\%}$

17)  $\frac{3}{25}$ 

$\boxed{12\%}$

18)  $\frac{1}{5}$ 

$\boxed{20\%}$

19)  $\frac{11}{15}$ 

$\boxed{73.3\%}$

20)  $\frac{21}{31}$ 

$\boxed{67.7\%}$

$0.7\bar{3}$

$0.6774$

## 6.5A Finding a Percent of a Number practice

Date \_\_\_\_\_ Period \_\_\_\_\_

Solve each problem.

1) What is 40% of 68?

$$0.4 \cdot 68 = \boxed{27.2}$$

2) What is 46% of 68?

$$0.46 \times 68 \quad \boxed{31.28}$$

3) What is 36% of 44?

$$0.36 \cdot 44 \quad \boxed{15.84}$$

4) 69% of 46 is what?

$$0.69 \times 46 \quad \boxed{31.74}$$

5) What is 50% of 45?

$$.5 \cdot 45 \quad \boxed{22.5}$$

6) What is 59% of 21?

$$0.59 \times 21 \quad \boxed{12.39}$$

7) 66% of 21 is what?

$$0.66 \times 21 \quad \boxed{13.86}$$

8) 72% of 22 is what?

$$0.72 \times 22 \quad \boxed{15.84}$$

9) 56% of 45 is what?

$$0.56 \times 45 \quad \boxed{25.2}$$

10) What is 53% of 21?

$$0.53 \times 21 \quad \boxed{11.13}$$

11) What is 33% of 68?

$$0.33 \times 68 \quad \boxed{22.44}$$

12) What is 76% of 46?

$$0.76 \times 46 \quad \boxed{34.96}$$

13) 43% of 44 is what?

$$0.43 \times 44 \quad \boxed{18.92}$$

14) 79% of 22 is what?

$$0.79 \times 22$$

15) What is 63% of 45?

$$0.63 \times 45 \quad \boxed{28.35}$$

$$\boxed{17.38}$$

# Chapter 6 Answers (continued)

11.  $z = 4$  12.  $a = 28$  13.  $r = 52$  14.  $t = 48$   
15.  $c = 6.3$  16.  $e = 18$

## Reteaching 6-3

- 1.a.  $\frac{MN}{ST} = \frac{MP}{SW}$ ,  $\frac{MN}{ST} = \frac{NP}{TW}$  b.  $\frac{20}{15} = \frac{NP}{24}$ ,  
 $SW = 27$ ,  $NP = 32$  2.  $DK = 55$ ,  $RV = 84$   
3.  $AN = 39$ ,  $GS = 42$

## Reteaching 6-4

1.  $\frac{1}{4}$  2.  $\frac{1}{6}$  3.  $\frac{5}{6}$  4. 1 5.  $\frac{3}{4}$  6. 0 7.  $\frac{1}{20}$  8.  $\frac{1}{2}$   
9.  $\frac{1}{5}$  10. 0 11.  $\frac{11}{20}$  12.  $\frac{2}{5}$  13.  $\frac{1}{4}$  14. 1  
15.  $\frac{1}{5}$  16.  $\frac{1}{2}$

## Reteaching 6-5

1. 70% 2. 60% 3. 55% 4. 68% 5. 20%  
6. 39% 7. 5% 8. 26% 9. 62.5%  
10. 18.75% 11.  $\frac{3}{20}$  12.  $\frac{1}{8}$  13.  $\frac{19}{25}$  14.  $\frac{7}{50}$   
15.  $\frac{3}{5}$  16.  $\frac{97}{100}$  17.  $\frac{1}{4}$  18.  $\frac{3}{10}$  19.  $\frac{41}{50}$  20.  $\frac{11}{16}$

## Reteaching 6-6

1. 80% 2. 75% 3. 68% 4. 127.5%  
5. 87.5% 6. 26.3% 7. 28.8 8. 57 9. 78  
10. 26.4 11. 12.2 12. 14.5 13. 70  
14. 300 15. 16 16. 30,666.7 17. 1,607.7  
18. 64.7

## Reteaching 6-7

1. 140% 2. 65% 3. 66.7% 4. 87.5%  
5. 37.5% 6. 22.2% 7. 39 8. 0.1 9. 102  
10. 117 11. 7 12. 47.3 13. 63.2 14. 70.8  
15. 140 16. 175 17. 384 18. 325

## Reteaching 6-8

1. 12.5% 2. 66.7% 3. 126.7% 4. 700%  
5. 62.5% 6. 75% 7. 40% 8. 175% 9. 75%  
10. 37.5% 11. 45% 12. 33.3% 13. 30.3%  
14. 12% 15. 100% 16. 68%

## Reteaching 6-9

1. \$25.50 2. \$81.60 3. \$203.50 4. \$143.55  
5. \$452.25 6. \$14.25 7. \$115.60 8. \$594.30  
9. \$17.99 10. \$1.68

## Reteaching 6-10

1. \$90; \$1,890 2. \$1,890; \$94.50; \$1,984.50  
3. \$1,984.50; \$99.23; \$2,083.73 4. \$2,083.73;  
\$104.19; \$2,187.92 5. \$2,187.92; \$109.40;  
\$2,297.32 6. \$2,297.32; \$114.87; \$2,412.19;  
7. \$2,412.19; \$120.61; \$2,532.80 8. \$2,532.80;  
\$126.64; \$2,659.44 9. \$2,659.44; \$132.97;  
\$2,792.41 10. \$2,792.41; \$139.62; \$2,932.03,  
\$2,932.03

## Enrichment 6-1

1. 460 2a.  $\frac{3}{10}$  2b.  $\frac{1}{20}$  2c.  $\frac{2}{5}$  2d.  $\frac{1}{4}$   
3a. 423,200 people 3b. 3,385,600 people  
4. 168 5a.  $\frac{1}{3}$  5b.  $\frac{5}{12}$  5c.  $\frac{1}{4}$  6. 29 7.  $\frac{29}{42}$

## Enrichment 6-2

1. Sample answers:  $\frac{4}{5} = \frac{8}{10}$ ,  $\frac{4}{8} = \frac{5}{10}$ , true 2. true  
3. true 4. true 5. false 6. false 7. true  
8. true 9.  $\frac{C+D}{D}$ ,  $\frac{C-D}{D}$  10. Sample answers:  
 $\frac{9}{-1} = \frac{18}{-2}$ ,  $\frac{5}{-1} = \frac{15}{-3}$ ,  $\frac{15}{-1} = \frac{30}{-2}$  11. yes

## Enrichment 6-3

1. Check students' work. 2. Check students'  
work. 3. Check students' drawings.

## Enrichment 6-4

1.  $\frac{1}{8}$ , 1 to 7 2.  $\frac{1}{2}$ , 1 to 1 3.  $\frac{3}{4}$ , 3 to 1 4.  $\frac{3}{8}$ , 3 to 5  
5.  $\frac{a}{a+b}$  6. 1 to 7 7. 13 to 3 8. 3 to 5  
9. 3 to 1 10.  $\frac{1}{8}$  11.  $\frac{13}{16}$  12.  $\frac{3}{8}$  13.  $\frac{3}{4}$

## Enrichment 6-5

1. 40% E 2. 35% A 3. 30% A 4. 8% A  
5. 25% I 6. 20% G 7.  $33\frac{1}{3}\%$  R 8. 80% C  
9. 37.5% N 10. 2% D 11. 3% S 12. 200%  
W 13. 2.5% L  
A SCALE DRAWING

## Enrichment 6-6

1. 400 2. 60%, 35%, 7% 3. age 20–39  
4. 120 males 5. 12.5% 6. 6,400 females  
7. 30 respondents 8.a. 35% b. 14 respondents